#127

COMPLETE

Collector:	Web Link 1 (Web Link)
Started:	Wednesday, March 16, 2022 10:46:50 AM
Last Modified:	Wednesday, March 16, 2022 3:37:34 PM
Time Spent:	04:50:43

Page 2: Section 1: submitter contact information

Q1

Name

Steve Gebbie

Q2

Email address

Privacy - 9(2)(a)

Q3   **Yes**

Can MBIE publish your name and contact information
with your submission?Confidentiality notice: Responding
"no" to this question does not guarantee that we will not
release the name and contact information your provided,
if any, as we may be required to do so by law. It does
mean that we will contact you if we are considering
releasing submitter contact information that you have
asked that we keep in confidence, and we will take your
request for confidentiality into account when making a
decision on whether to release it.

Q4   **Yes**

Can MBIE contact you in relation to your submission?

Page 3: Section 2: Submitter information

Q5   **Individual**

Are you submitting as an individual or on behalf of an
organisation?

Page 4: Section 2: Submitter information - individual

Q6   **No**

Are you a researcher or scientist?

Q7

Age

Q8

Gender

Q9

In which region do you primarily work?

Q10

Ethnicity

Page 5: Section 2: Submitter information - individual

Q11

What is your iwi affiliation?

Respondent skipped this question

Page 6: Section 2: Submitter information - individual

Q12

If you wish, please specify to which Pacific ethnicity you identify

Respondent skipped this question

Page 7: Section 2: Submitter information - individual

Q13

What type of organisation do you work for?

Crown Research Institute or Callaghan Innovation

Q14

Is it a Māori-led organisation?

No

Q15

Which disciplines are most relevant to your work?

Agricultural, veterinary and food sciences,

Biological sciences,

Built environment and design,

Chemical sciences,

Earth sciences,

Engineering,

Environmental sciences

Q16

What best describes the use of Mātauranga Māori (Māori knowledge) in your work?

There is some Mātauranga Māori, but it is not the main science knowledge

Page 8: Section 2: Submitter information - organisation

Q17

Organisation name

Respondent skipped this question

Q18

Organisation type

Respondent skipped this question

Q19

Is it a Māori-led organisation?

Respondent skipped this question

Q20

Where is the headquarters of the organisation?

Respondent skipped this question

Q21

What best describes the use of Mātauranga Māori (Māori knowledge) in your organisation?

Respondent skipped this question

Page 9: Section 3: Research Priorities

Q22

Priorities design: What principles could be used to determine the scope and focus of research Priorities? (See page 27 of the Green Paper for additional information related to this question)

Respondent skipped this question

Q23

Priority-setting process: What principles should guide a national research Priority-setting process, and how can the process best give effect to Te Tiriti?(See pages 28-29 of the Green Paper for additional information related to this question)

Respondent skipped this question

Q24

Operationalising Priorities: How should the strategy for each national research Priority be set and how do we operationalise them?(See pages 30-33 of the Green Paper for additional information related to this question)

Respondent skipped this question

Page 10: Section 4: Te Tiriti, mātauranga Māori, and Māori aspirations

Q25   **Respondent skipped this question**

Engagement: How should we engage with Māori and
Treaty Partners?(See page 38 of the Green Paper for
additional information related to this question)

Q26   **Respondent skipped this question**

Mātauranga Māori: What are your thoughts on how to
enable and protect mātauranga Māori in the research
system?(See pages 38-39 of the Green Paper for
additional information related to this question)

Q27   **Respondent skipped this question**

Regionally based Māori knowledge hubs: What are your
thoughts on regionally based Māori knowledge hubs?
(See page 39 of the Green Paper for additional
information related to this question)

Page 11: Section 5: Funding

Q28   **Respondent skipped this question**

Core Functions: How should we decide what constitutes
a core function, and how do we fund them?(See pages
44-46 of the Green Paper for additional information
related to this question)

Q29   **Respondent skipped this question**

Establishing a base grant and base grant design: Do you
think a base grant funding model will improve stability
and resilience for research organisations?(See pages
46-49 of the Green Paper for additional information
related to this question)

Q30   **Respondent skipped this question**

Establishing a base grant and base grant design: How
should we go about designing and implementing such a
funding model?(See pages 46-49 of the Green Paper for
additional information related to this question)

Page 12: Section 6: Institutions

Q31   **Respondent skipped this question**

Institution design: How do we design collaborative,
adaptive and agile research institutions that will serve
current and future needs?(See pages 57-58 of the Green
Paper for additional information related to this question)

Q32

Role of institutions in workforce development: How can institutions be designed to better support capability, skill and workforce development?(See page 58 of the Green Paper for additional information related to this question)

Respondent skipped this question

Q33

Better coordinated property and capital investment: How should we make decisions on large property and capital investments under a more coordinated approach?(See pages 58-59 of the Green Paper for additional information related to this question)

Respondent skipped this question

Q34

Institution design and Te Tiriti: How do we design Tiriti-enabled institutions? (See page 59 of the Green Paper for additional information related to this question)

Respondent skipped this question

Q35

Knowledge exchange: How do we better support knowledge exchange and impact generation? What should be the role of research institutions in transferring knowledge into operational environments and technologies?(See pages 60-63 of the Green Paper for additional information related to this question)

Respondent skipped this question

Page 13: Section 7: Research workforce

Q36

Workforce and research Priorities: How should we include workforce considerations in the design of national research Priorities?(See pages 69-70 of the Green Paper for additional information related to this question)

Respondent skipped this question

Q37

Base grant and workforce: What impact would a base grant have on the research workforce?(See pages 70-71 of the Green Paper for additional information related to this question)

Respondent skipped this question

Q38

Better designed funding mechanisms: How do we design new funding mechanisms that strongly focus on workforce outcomes? (See page 72 of the Green Paper for additional information related to this question)

Respondent skipped this question

Page 14: Section 8: Research infrastructure

Q39

Funding research infrastructure: How do we support sustainable, efficient and enabling investment in research infrastructure?(See pages 77-78 of the Green Paper for additional information related to this question)

Regional Research and Development Engineering Technology Hubs
Propose that two Regional Research and Development Engineering Technology Hubs be set up in support of CRI's, possibly based on the Agresearch operating model. One in Christchurch and one in the North Island. These Hubs could be linked to collaborate with similar centres of excellence for other organisations and universities in New Zealand and internationally (for example CSIRO Data61)
Success of CRI's depends on the ability to attract funding and deliver innovative science …. To this end the Agresearch Engineering Development team are a key capability and often are the enablers for research innovation through to commercial developments. The Agresearch Engineering capability and delivery is unique within CRI's and New Zealand Inc.
Who are We: The Agresearch Development Engineering Team currently operate from a well-resourced workshop at Lincoln, providing engineering technology solutions and services in support of our science both in New Zealand and abroad. Concepts are often taken, beyond the immediate science, through various R&D stages, from rudimentary developments through prototyping to small numbers of commercial equipment. Design and build range from high accuracy GPS (global positioning system) wearables for animals to 100 tonnes in vessel composting machines.

Team: The team consists of 7 permanent staff with a unique skill set. 6 are based at Lincoln and one at Ruakura. The team operate from a well-resourced workshop on the Agresearch Lincoln campus. Success can be attributed to the teams broad set of capabilities working together and with select industry providers to deliver solutions.

What we Do: The team contribute to the identification and development of opportunities to innovate, adapt, build, integrate and apply physical and cyber-physical technologies in support of the Pastoral, Agri-food, and Agri-technology sectors.
These Physical and cyber-physical systems encompass; Distributed Sensory Networks and Internet of Things (IoT), Smart Sensing technologies (Smart Sens), Instrumentation, Automation and Robotics, Electronics and Embedded Systems, Signal processing and machine vision, Expert Systems, Software Engineering, Mechanical and Process engineering, Product Design, Prototyping and Field testing, through to Engineering and control systems manufacture, installation, and commissioning.
Risk Business: R&D is a risk business, and the Agresearch Development Team has a strong record of successful delivery to science and stakeholders in this environment.
Multi-disciplined, dedicated teams have a vested interest in science. (As opposed to private companies focussed on financial balance sheets). They hold a level of expertise and knowledge which can only be gained by working closely and collaboratively with science teams. They can prioritise in the best interest of science. Their focus is on fit for purpose solutions following consultation with teams to understand projects requirements and expected outcomes. Engineering technology teams will often challenge scientists, offering alternative solutions and technologies that benefit the project to provide innovative, but pragmatic solutions.

Take Up by Industry: Getting results of research and development into industry and end users is crucial…we are all aware of the "Valley of Death" for start-up business. Development teams are confident and experienced in taking science level developments through to pre-commercial prototypes for validation in industry, followed by technical transfer for scaled commercial solutions. Thus, reducing risk and attracting investment from commercial operators.